

Amendments to the Specification:

Please add the following new paragraph after line 13 on page 10: [Note: this would be a new paragraph after paragraph 0048 in the published application.]

B1

[0048.1] FIG. 23A is an elevational view of the primary vane half along line 23A-23A of Fig. 23.

Please replace the paragraph on page 14, lines 13-20 with the following amended paragraph: [paragraph 0060 in published application]

B2

[0060] The hinge portions 66, 68 are each provided with a stub shaft recess 72. A stub shaft 74 is shown provided with the hinge portion 66 of the vane half 56. This stub shaft 56 74 may be integrally formed with one of the vane halves 56, 58 or may be a separate member that is fixed in place. As is shown, the stub shaft 74 projects a distance outward beyond the hinge portion 66. The hinge portions 66, 68 are each squared or flat along the outer side edges.

Please replace the paragraph beginning on page 31, line 30 and extending to page 32 line 10 with the following amended paragraph: [paragraph 0107 in published application]

B3

[0107] In another embodiment, the vanes may be configured with recesses or hollowed out areas to reduce the weight of the vane, as shown in FIG. 23A. This is particularly important with respect to the secondary vane because the secondary vane is both rotated and reciprocated along the primary axis. Because the secondary vane is reciprocated between the open and closed positions, it undergoes numerous and rapid changes in angular velocity during operation. The inertial forces created by these changes in angular velocity place a large amount of stress on the vane. By reducing the weight of the vane, the inertial forces can be reduced. This is particularly advantageous in pumps that operate at high speed and low pressures.